

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
		((cal\$4 ring\$4) and circuit and (remove eliminate) and (relay switch)).ab"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/02/10 11:32
L1	18	((379/372).CCLS.) and (impedance or resistance).ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/12/16 12:54
S1	282954	(ring\$3 or call\$3).ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/01 12:12
S2	1706	(slc or "line interface" or "loop interface").ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 11:23
S3	26	((379/372).CCLS.) and ring\$3.ti.	USPAT	OR	OFF	2003/07/02 15:48
S4	17	((379/372).CCLS.) and (impedance or resistance).ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 15:48
S5	62	((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 15:50
S6	8	"4953206".URPN.	USPAT	OR	OFF	2003/07/02 15:52
S7	14	("1277025" "2212927" "2260296" "3309633" "3340364" "3535646" "3641357" "3736437" "4178480" "4456985" "4456986" "4546212" "4608686" "4640989").PN.	USPAT	OR	OFF	2003/07/02 16:00
S8	27	(ringing and impulse and noise).ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 15:52
S9	9	((ringer "ring send\$3" "ring\$send\$3") and impulse).ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 15:52

S10	306	ring\$3 same ("high impedance" or "high resistance") same (switch)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/03 09:35
S11	19	(ring\$3 same ("high impedance" or "high resistance") same (switch)) and ring\$3.ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/03 09:35
S12	46	"4551581".URPN.	USPAT	OR	OFF	2003/07/03 10:41
S13	51	(ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/02/09 11:36
S14	198	(379/372).CCLS.	USPAT; USOCR	OR	OFF	2004/02/09 11:30
S15	69	((((379/142.04,82,179,207.08,207.09,252,375.01,376.02,413.01,418,25,88.19-88.23,93.03,29.06,142.01,142.08,93.05,416,417,422).CCLS.) and ("caller id" or "caller identification")) and switch and ring\$3 and silent	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/02/09 11:30
S16	39	(ringing and slic).ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/02/09 11:36
S17	0	((ringing and slic).ab.) and (variable same impedance)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/02/09 11:36
S18	2	((ringing and slic).ab.) and (variable and impedance)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/02/09 11:36
S19	4439	379/142.04,82,179,207.08,207.09,252,375.01,376.02,413.01,418,25,88.19-88.23,93.03,29.06,142.01,142.08,93.05,416,417,422.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/02/10 11:07
S20	36	379/142.04,82,179,207.08,207.09,252,375.01,376.02,413.01,418,25,88.19-88.23,93.03,29.06,142.01,142.08,93.05,416,417,422.ccls. and feed.ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/02/10 11:20

S21	424	tou.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/02/10 11:21
S22	1	"call signal transmission".ti. and mizu.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/02/10 11:31
S23	729	((cal\$4 ring\$4) and circuit and (remove eliminate) and (relay switch)).ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/02/10 11:32
S24	176	((cal\$4 ring\$4) and circuit and ((remove eliminate) with (relay switch)))).ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/02/10 11:36
S25	2	"6115469".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/02/10 11:37
S26	38	((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) not (trip).ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/01 10:54
S27	43	"dial pulse distortion"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/01 11:13
S28	40	"ring distortion".ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/01 11:16
S29	192	(379/372).CCLS.	USPAT; USOCR	OR	OFF	2003/07/01 11:16
S30	296	(379/372,25).CCLS.	USPAT; USOCR	OR	OFF	2003/07/01 11:17
S31	104	(379/25).CCLS.	USPAT; USOCR	OR	OFF	2003/07/01 11:17
S32	0	("8andring\$3.ti.").PN.	USPAT; USOCR	OR	OFF	2003/07/01 11:18

S33	26	(((379/372).CCLS.) and ring\$3.ti.) not ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.)	USPAT	OR	OFF	2003/07/01 11:20
S34	46	"4551581".URPN.	USPAT	OR	OFF	2003/07/01 11:57
S35	0	"2001136277".URPN.	USPAT	OR	OFF	2003/07/02 10:03
S36	0	"2001136277".URPN.	USPAT	OR	OFF	2003/07/02 10:03
S37	0	"62078941".URPN.	USPAT	OR	OFF	2003/07/02 11:23
S38	26	((ringing and impulse and noise).ab.) not (((slic or "line interface" or "loop intereface").ti.) and ("high impedance" or "high resistance").ab.) ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) (((379/372).CCLS.) and ring\$3.ti.) (((379/372).CCLS.) and (impedance or resistance).ab.) (((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 10:57
S39	168	(((slic or "line interface" or "loop intereface").ti.) and ("high impedance" or "high resistance").ab.) ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) (((379/372).CCLS.) and ring\$3.ti.) (((379/372).CCLS.) and (impedance or resistance).ab.) (((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 09:18

S40	8	"4953206".URPN. not (((((slic or "line interface" or "loop intereface").ti.) and ("high impedance" or "high resistance").ab.) ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) (((379/372).CCLS.) and ring\$3.ti.) (((379/372).CCLS.) and (impedance or resistance).ab.) (((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.)) or (((ringing and impulse and noise).ab.) not (((slic or "line interface" or "loop intereface").ti.) and ("high impedance" or "high resistance").ab.) ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) (((379/372).CCLS.) and ring\$3.ti.) (((379/372).CCLS.) and (impedance or resistance).ab.) (((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.))))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 11:24
S41	14	((("1277025" "2212927" "2260296" "3309633" "3340364" "3535646" "3641357" "3736437" "4178480" "4456985" "4456986" "4546212" "4608686" "4640989").PN.) not (((((slic or "line interface" or "loop intereface").ti.) and ("high impedance" or "high resistance").ab.) ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) (((379/372).CCLS.) and ring\$3.ti.) (((379/372).CCLS.) and (impedance or resistance).ab.) (((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.)) or (((ringing and impulse and noise).ab.) not (((slic or "line interface" or "loop intereface").ti.) and ("high impedance" or "high resistance").ab.) ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) (((379/372).CCLS.) and ring\$3.ti.) (((379/372).CCLS.) and (impedance or resistance).ab.) (((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.))))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 11:24

S42	194	(((slic or "line interface" or "loop intereface").ti.) and ("high impedance" or "high resistance").ab.) ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) (((379/372).CCLS.) and ring\$3.ti.) (((379/372).CCLS.) and (impedance or resistance).ab.) (((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.)) or (((ringing and impulse and noise).ab.) not (((slic or "line interface" or "loop intereface").ti.) and ("high impedance" or "high resistance").ab.) ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) (((379/372).CCLS.) and ring\$3.ti.) (((379/372).CCLS.) and (impedance or resistance).ab.) (((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 11:54
S43	0	("16or14or15").PN.	USPAT; USOCR	OR	OFF	2003/07/02 11:54
S44	1	((("4387273").PN.) not ((((((slic or "line interface" or "loop intereface").ti.) and ("high impedance" or "high resistance").ab.) ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) (((379/372).CCLS.) and ring\$3.ti.) (((379/372).CCLS.) and (impedance or resistance).ab.) (((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.)) or (((ringing and impulse and noise).ab.) not (((slic or "line interface" or "loop intereface").ti.) and ("high impedance" or "high resistance").ab.) ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) (((379/372).CCLS.) and ring\$3.ti.) (((379/372).CCLS.) and (impedance or resistance).ab.) (((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.)))) or "4953206".URPN. or (("1277025" "2212927" "2260296" "3309633" "3340364" "3535646" "3641357" "3736437" "4178480" "4456985" "4456986" "4546212" "4608686" "4640989").PN.))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 11:54

S45	1	("4387273").PN.	USPAT; USOCR	OR	OFF	2003/07/02 11:53
S46	1	((("4161363").PN.) not ((((((slic or "line interface" or "loop intereface").ti.) and ("high impedance" or "high resistance").ab.) ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) (((379/372).CCLS.) and ring\$3.ti.) (((379/372).CCLS.) and (impedance or resistance).ab.) (((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.)) or (((ringing and impulse and noise).ab.) not (((slic or "line interface" or "loop intereface").ti.) and ("high impedance" or "high resistance").ab.) ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) (((379/372).CCLS.) and ring\$3.ti.) (((379/372).CCLS.) and (impedance or resistance).ab.) (((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.)))) or "4953206".URPN. or (((("1277025" "2212927" "2260296" "3309633" "3340364" "3535646" "3641357" "3736437" "4178480" "4456985" "4456986" "4546212" "4608686" "4640989").PN.))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 11:57
S47	1	("4161363").PN.	USPAT; USOCR	OR	OFF	2003/07/02 11:58
S48	0	("31not27").PN.	USPAT; USOCR	OR	OFF	2003/07/02 11:58
S49	1	("4161633").PN.	USPAT; USOCR	OR	OFF	2003/07/02 12:19
S50	0	("8and(impedanceorresistance).ab. ").PN.	USPAT; USOCR	OR	OFF	2003/07/02 15:50
S51	0	((379/372).CCLS.) and ((loop line feed) adj (resistance impedance)). ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/01 12:47

S52	0	(((slic or "line interface" or "loop intereface").ti.) and ("high impedance" or "high resistance").ab.) and ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) and (((379/372).CCLS.) and ring\$3.ti.) and (((379/372).CCLS.) and (impedance or resistance).ab.) and (((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 12:19
S53	216	((((slic or "line interface" or "loop intereface").ti.) and ("high impedance" or "high resistance").ab.) ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) (((379/372).CCLS.) and ring\$3.ti.) (((379/372).CCLS.) and (impedance or resistance).ab.) ((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.)) or (((ringing and impulse and noise).ab.) not (((slic or "line interface" or "loop intereface").ti.) and ("high impedance" or "high resistance").ab.) ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) (((379/372).CCLS.) and ring\$3.ti.) (((379/372).CCLS.) and (impedance or resistance).ab.) ((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.)))) or "4953206".URPN. or (("1277025" "2212927" "2260296" "3309633" "3340364" "3535646" "3641357" "3736437" "4178480" "4456985" "4456986" "4546212" "4608686" "4640989").PN.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 11:57

S54	5	(((ringer "ring send\$3" "ring\$send\$3") and impulse).ab.) not ((((((slic or "line interface" or "loop intereface").ti.) and ("high impedance" or "high resistance"). ab.) ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) (((379/372).CCLS.) and ring\$3.ti.) (((379/372).CCLS.) and (impedance or resistance).ab.) (((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.)) or (((ringing and impulse and noise). ab.) not (((slic or "line interface" or "loop intereface").ti.) and ("high impedance" or "high resistance"). ab.) ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) (((379/372).CCLS.) and ring\$3.ti.) (((379/372).CCLS.) and (impedance or resistance).ab.) (((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.)))) or "4953206".URPN. or (("1277025" "2212927" "2260296" "3309633" "3340364" "3535646" "3641357" "3736437" "4178480" "4456985" "4456986" "4546212" "4608686" "4640989").PN.))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 12:21
S55	74	(((slic or "line interface" or "loop intereface").ti.) and ("high impedance" or "high resistance"). ab.) ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) (((379/372).CCLS.) and ring\$3.ti.) (((379/372).CCLS.) and (impedance or resistance).ab.) (((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.) "4953206".URPN. (("1277025" "2212927" "2260296" "3309633" "3340364" "3535646" "3641357" "3736437" "4178480" "4456985" "4456986" "4546212" "4608686" "4640989").PN.) ((ringing and impulse and noise).ab.) (((ringer "ring send\$3" "ring\$send\$3") and impulse).ab.)	USPAT	OR	OFF	2003/07/02 16:00

S56	1	((("slic or "line interface" or "loop interface").ti.) and ("high impedance" or "high resistance").ab.) not (((slic or "line interface" or "loop interface").ti.) and ("high impedance" or "high resistance").ab.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 16:07
S57	23	((("slic or "line interface" or "loop interface").ti.) and ("high impedance" or "high resistance").ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 16:04
S58	2	((379/142.04,82,179,207.08,207.09,252,375.01,376.02,413.01,418,25,88.19-88.23,93.03,29.06,142.01,142.08,93.05,416,417,422).CCLS.) and (ring\$3 with (impedance resistance) with impulse with (line loop))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 16:06
S59	33	((((379/142.04,82,179,207.08,207.09,252,375.01,376.02,413.01,418,25,88.19-88.23,93.03,29.06,142.01,142.08,93.05,416,417,422).CCLS.) and (ring\$3 and (impedance resistance) and impulse and (line loop))) not (((("slic or "line interface" or "loop interface").ti.) and ("high impedance" or "high resistance").ab.) ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) (((379/372).CCLS.) and ring\$3.ti.) (((379/372).CCLS.) and (impedance or resistance).ab.) (((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.) "4953206".URPN. ("1277025" "2212927" "2260296" "3309633" "3340364" "3535646" "3641357" "3736437" "4178480" "4456985" "4456986" "4546212" "4608686" "4640989").PN.) ((ringing and impulse and noise).ab.) (((ringer "ring send\$3" "ring\$send\$3") and impulse).ab.))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 16:32

S60	29	(((379/142.04,82,179,207.08,207.09,252,375.01,376.02,413.01,418,25,88.19-88.23,93.03,29.06,142.01,142.08,93.05,416,417,422).CCLS.) and (ring\$3 and (impedance resistance) and impulse and (line loop))) not (((slc or "line interface" or "loop intereface").ti.) and ("high impedance" or "high resistance").ab.) ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) (((379/372).CCLS.) and ring\$3.ti.) (((379/372).CCLS.) and (impedance or resistance).ab.) (((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.) "4953206".URPN. ("1277025" "2212927" "2260296" "3309633" "3340364" "3535646" "3641357" "3736437" "4178480" "4456985" "4456986" "4546212" "4608686" "4640989").PN.) ((ringing and impulse and noise).ab.) (((ringer "ring send\$3" "ring\$send\$3") and impulse).ab.))) and switch	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 17:10
S61	0	(((slc or "line interface" or "loop intereface").ti.) and ("high impedance" or "high resistance").ab.) and impulse	USPAT	OR	OFF	2003/07/02 16:48
S62	1	("4720853").PN.	USPAT; USOCR	OR	OFF	2003/07/02 17:11
S63	1	(((4720853).PN.) and impulse	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 17:11
S64	24	((slc or "line interface" or "loop interface").ti.) and ("high impedance" or "high resistance").ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 16:05
S65	34	((379/142.04,82,179,207.08,207.09,252,375.01,376.02,413.01,418,25,88.19-88.23,93.03,29.06,142.01,142.08,93.05,416,417,422).CCLS.) and (ring\$3 and (impedance resistance) and impulse and (line loop))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 17:12

S66	1	(((((379/142.04,82,179,207.08,207.09,252,375.01,376.02,413.01,418,25,88.19-88.23,93.03,29.06,142.01,142.08,93.05,416,417,422).CCLS.) and ("caller id" or "caller identification")) and switch and ring\$3 and silent) and impulse	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 17:17
S67	221	((((slic or "line interface" or "loop intereface").ti.) and ("high impedance" or "high resistance").ab.) ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) (((379/372).CCLS.) and ring\$3.ti.) (((379/372).CCLS.) and (impedance or resistance).ab.) (((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.) "4953206".URPN. (("1277025" "2212927" "2260296" "3309633" "3340364" "3535646" "3641357" "3736437" "4178480" "4456985" "4456986" "4546212" "4608686" "4640989").PN.) ((ringing and impulse and noise).ab.) (((ringer "ring send\$3" "ring\$send\$3") and impulse).ab.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 17:12
S68	0	(((((379/142.04,82,179,207.08,207.09,252,375.01,376.02,413.01,418,25,88.19-88.23,93.03,29.06,142.01,142.08,93.05,416,417,422).CCLS.) and ("caller id" or "caller identification") and (slic "line interface" "line\$interface")) and (impulse or transient or pulse) and silent and ring\$3) not (((379/142.04,82,179,207.08,207.09,252,375.01,376.02,413.01,418,25,88.19-88.23,93.03,29.06,142.01,142.08,93.05,416,417,422).CCLS.) and ("caller id" or "caller identification")) and switch and ring\$3 and silent)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 17:46

S69	87	(((379/142.04,82,179,207.08,207.09,252,375.01,376.02,413.01,418,25,88.19-88.23,93.03,29.06,142.01,142.08,93.05,416,417,422).CCLS.) and ("caller id" or "caller identification") and (slic "line interface" "line\$interface")) not (((379/142.04,82,179,207.08,207.09,252,375.01,376.02,413.01,418,25,88.19-88.23,93.03,29.06,142.01,142.08,93.05,416,417,422).CCLS.) and ("caller id" or "caller identification")) and switch and ring\$3 and silent)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 17:46
S70	106	((379/142.04,82,179,207.08,207.09,252,375.01,376.02,413.01,418,25,88.19-88.23,93.03,29.06,142.01,142.08,93.05,416,417,422).CCLS.) and ("caller id" or "caller identification") and (slic "line interface" "line\$interface"))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 17:45
S71	13	(((379/142.04,82,179,207.08,207.09,252,375.01,376.02,413.01,418,25,88.19-88.23,93.03,29.06,142.01,142.08,93.05,416,417,422).CCLS.) and ("caller id" or "caller identification") and (slic "line interface" "line\$interface")) and (impulse or transient or pulse) and silent and ring\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 17:47

S72	54	(((379/142.04,82,179,207.08,207.09,252,375.01,376.02,413.01,418,25,88.19-88.23,93.03,29.06,142.01,142.08,93.05,416,417,422).CCLS.) and ("caller id" or "caller identification")) and switch and ring\$3 and silent) not (((slic or "line interface" or "loop interface").ti.) and ("high impedance" or "high resistance").ab.) ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) (((379/372).CCLS.) and ring\$3.ti.) (((379/372).CCLS.) and (impedance or resistance).ab.) (((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.) "4953206".URPN. (("1277025" "2212927" "2260296" "3309633" "3340364" "3535646" "3641357" "3736437" "4178480" "4456985" "4456986" "4546212" "4608686" "4640989").PN.) ((ringing and impulse and noise).ab.) (((ringer "ring send\$3" "ring\$send\$3") and impulse).ab.)) or (((slic or "line interface" or "loop interface").ti.) and ("high impedance" or "high resistance").ab.) or (((379/142.04,82,179,207.08,207.09,252,375.01,376.02,413.01,418,25,88.19-88.23,93.03,29.06,142.01,142.08,93.05,416,417,422).CCLS.) and (ring\$3 and (impedance resistance) and impulse and (line loop))))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 17:17
S73	520	((379/142.04,82,179,207.08,207.09,252,375.01,376.02,413.01,418,25,88.19-88.23,93.03,29.06,142.01,142.08,93.05,416,417,422).CCLS.) and ("caller id" or "caller identification")	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 17:42

S74	255	(((slic or "line interface" or "loop intereface").ti.) and ("high impedance" or "high resistance").ab.) ((ring\$3 and (generat\$3 or circuit or signal\$4)).ti. and (loop and (impedance or resistance)).ab.) (((379/372).CCLS.) and ring\$3.ti.) (((379/372).CCLS.) and (impedance or resistance).ab.) (((ring\$3 or call\$3).ti.) and ((loop line feed) adj (resistance impedance)).ab.) "4953206".URPN. (("1277025" "2212927" "2260296" "3309633" "3340364" "3535646" "3641357" "3736437" "4178480" "4456985" "4456986" "4546212" "4608686" "4640989").PN.) ((ringing and impulse and noise).ab.) (((ringer "ring send\$3" "ring\$send\$3") and impulse).ab.)) or (((slic or "line interface" or "loop interface").ti.) and ("high impedance" or "high resistance").ab.) or (((379/142.04, 82,179,207.08,207.09,252,375.01, 376.02,413.01,418,25,88.19-88.23, 93.03,29.06,142.01,142.08,93.05, 416,417,422).CCLS.) and (ring\$3 and (impedance resistance) and impulse and (line loop)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2003/07/02 17:17
S75	0	379/142.04,82,179,207.08,207.09, 252,375.01,376.02,413.01,418,25, 88.19-88.23,93.03,29.06,142.01, 142.08,93.05,416,417,422	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/02/10 10:07
S76	3449	(379/142.04,82,179,207.08,207.09, 252,375.01,376.02,413.01,418,25, 88.19-88.23,93.03,29.06,142.01, 142.08,93.05,416,417,422).CCLS.	USPAT; USOCR	OR	OFF	2004/02/10 10:07
S77	16	tou.in. and takashi.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/02/10 11:21
S78	0	tou.in. and call.ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/02/10 11:22
S79	98	"call signal transmission".ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/02/10 11:28

S80	1906	(slic or "line interface" or "loop interface").ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/12/16 11:24
S81	4	((ringing and slic).ab.) and (variable and impedance)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/12/16 11:25
S82	39	379/142.04,82,179,207.08,207.09,252,375.01,376.02,413.01,418,25,88.19-88.23,93.03,29.06,142.01,142.08,93.05,416,417,422.ccls. and feed.ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/12/16 11:25
S83	4825	379/142.04,82,179,207.08,207.09,252,375.01,376.02,413.01,418,25,88.19-88.23,93.03,29.06,142.01,142.08,93.05,416,417,422.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/12/16 11:25
S84	178	((cal\$4 ring\$4) and circuit and ((remove eliminate) with (relay switch))).ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/12/16 11:25